

CLAIMS

1. An apparatus for treating urinary incontinence, comprising:
a support section adapted for providing urethral support;
an anchoring section adapted for resisting movement of said apparatus in a vagina;
an insert separate from the support section, a portion of which is adapted to be positioned proximal to said support section; and,
wherein said insert selectively provides at least support to said support section of said apparatus.
2. An apparatus according to claim 1, wherein said insert is adapted to provide pressure to said support section, causing radial expansion of said support section.
3. An apparatus according to claim 1, wherein said support section is flexible.
4. An apparatus according to claim 1, wherein said support section is comprised of at least one support arm.
5. An apparatus according to claim 1 wherein said insert is an o-ring.
6. An apparatus according to claim 1, wherein said insert is flared.
7. An apparatus according to claim 1 wherein urethral support is mid-urethral support.
8. An apparatus according to claim 1, further comprising a cover.
9. An apparatus according to claim 1, wherein said insert is conical.
10. An apparatus according to claim 1, wherein said insert is comprised of a plurality of geometrically interlocking elements.

11. An apparatus according to claim 1, wherein said insert is comprised of at least a supporting protrusion and a locking protrusion.
12. An apparatus according to claim 1, wherein said insert is an invertible membrane.
13. An apparatus according to claim 1, wherein said insert is a ringed insert.
14. An apparatus according to claim 1, further comprising a resilient support member.
15. An apparatus according to claim 14, wherein said resilient support member biases at least said support section towards a central axis of said apparatus.
16. An apparatus according to claim 14, wherein said resilient support member biases at least said support section away from a central axis of said apparatus.
17. An apparatus according to claim 1, wherein said support section and anchoring section are comprised of at least 2 arms, respectively.
18. An apparatus according to claim 17, wherein said arms are provided with a folding section.
19. An apparatus according to claim 8, wherein said cover substantially encapsulates said apparatus.
20. An apparatus according to claim 1, wherein at least said support section and said anchoring section are flexible.
21. An apparatus according to claim 1, wherein said apparatus is flexible.
22. An apparatus according to claim 1, further comprising a removal device.

23. An apparatus for treating urinary incontinence, comprising:
a support section adapted for providing urethral support;
an anchoring section adapted for resisting movement of said apparatus in a vagina; and,
an insert, adapted to provide at least support to said support section and at least a portion of said insert being elastic.
24. An apparatus according to claim 23, wherein said insert is comprised of a plurality of components removably fitted together.
25. An apparatus according to claim 23, wherein said insert urges said support section radially outwards from a central axis of said apparatus.
26. An apparatus according to claim 23, wherein said insert is provided with an expanded end which provides radial expansion to said anchoring section.
27. An apparatus according to claim 23, further comprising a cover.
28. An apparatus according to claim 27, wherein said cover substantially encapsulates said apparatus.
29. An apparatus according to claim 23, wherein at least said support section and said anchoring section are flexible.
30. An apparatus according to claim 23, wherein said apparatus is flexible.
31. An apparatus according to claim 23, further comprising a removal device.
32. An apparatus according to claim 23, wherein urethral support is mid-urethral support.

33. An apparatus according to claim 23, wherein said support section is comprised of at least one support arm.
34. An apparatus for treating urinary incontinence, comprising:
a support section adapted for providing urethral support;
an anchoring section for resisting movement of said apparatus;
at least one expander node, provided with at least one expander connected to said apparatus;
an elastic member which passes through said at least one expander node;
a removable safety catch provided to an expanded end of said elastic member which prevents expanded end from passing through said at least one expander node, and,
wherein when said elastic member is substantially unstretched, the at least one expander causes radial expansion of said apparatus.
35. An apparatus according to claim 34, further comprising a cover.
36. An apparatus according to claim 35, wherein said cover substantially encapsulates said node, support section and said anchoring section.
37. An apparatus according to claim 34, wherein at least said support section and said anchoring section are flexible.
38. An apparatus according to claim 34, further comprising a removal device provided to the safety catch.
39. An apparatus according to claim 34, wherein the urethral support is mid-urethral support.
40. An apparatus according to claim 34, wherein the support section is comprised of at least one support arm.

41. An apparatus for treating urinary incontinence, comprising:
a support section adapted for providing urethral support;
an anchoring section for resisting movement of said apparatus;
a first groove;
an elastomeric ring positioned on an exterior surface of said apparatus within said first groove; and,
wherein said elastomeric ring provides compression force to at least a portion of said apparatus.
42. An apparatus according to claim 41, wherein said elastomeric ring applies compression force to said support section to effectuate radial contraction of said support section.
43. An apparatus according to claim 41, further comprising a second groove located between said first groove and said support section.
44. An apparatus according to claim 43, further comprising a pivot piece located in a third groove.
45. An apparatus according to claim 44, wherein upon deployment said elastomeric ring transitions from said first groove to said second groove causing radial expansion of said support and anchor sections.
46. An apparatus according to claim 44, further comprising a removal device attached at least to said pivot piece.
47. An apparatus according to claim 41, further comprising a cover.

48. An apparatus according to claim 41, wherein said support and anchoring sections are flexible.
49. An apparatus for treating urinary incontinence, comprising:
a support section adapted for providing selective urethral support;
an anchoring section for resisting movement of said apparatus; and,
a tensile element, said tensile element attached to said support section and said anchoring section and adapted to provide radial expansion to said apparatus.
50. An apparatus according to claim 49, wherein said tensile element is elastic.
51. An apparatus for treating urinary incontinence, comprising:
a support section adapted for providing vaginal urethral support; and,
wherein said apparatus is provided with a first stable position and second stable position, such that when apparatus is in said second stable position said support section renders support to said urethra.
52. An apparatus according to claim 51, wherein said support section is provided with a plurality of support arms.
53. An apparatus according to claim 51, further comprising a bi-stable component wherein said bi-stable component is attached to said support section.
54. An apparatus according to claim 53, wherein said bi-stable component is a flexible membrane.
55. An apparatus according to claim 53, wherein said bi-stable component is a locking element.
56. An apparatus according to claim 53, wherein said bi-stable component is ring.

57. An apparatus according to claim 56, further comprising a first groove associated with said first stable position and a second groove associated with said second stable position.
58. An apparatus according to claim 57, wherein said ring is slidable on an exterior of said apparatus from said first groove to said second groove.
59. An apparatus according to claim 51, further comprising a removal device.
60. An apparatus according to claim 54, wherein a removal device is attached to said bi-stable component for changing said second stable position to said first stable position.
61. An apparatus for treating urinary incontinence, comprising:
a support section adapted to render support to a urethra;
an insert separate from the support section, said insert comprising a first material which exhibits first material properties and at least a second material which exhibits second material properties; and,
wherein said insert selectively expands said support section.
62. An apparatus according to claim 61, wherein said first material is flexible.
63. An apparatus according to claim 61, wherein said second material is more rigid than the support section.
64. An apparatus for treating urinary incontinence, comprising:
a central node, wherein said central node is a rolled sheet;
a plurality of support protrusions located on said node; and,
a plurality of anchor protrusions located on said node.
65. An apparatus according to claim 64, wherein said central node when rolled has a larger diameter on one end than the other end.

66. An apparatus for treating urinary incontinence, comprising:
a connector; and,
a plurality of scrolling sections attached to the connector provided with a larger diameter than the connector at least when deployed.
67. An apparatus according to claim 66, wherein said connector is flexible.
68. An apparatus according to claim 66, wherein said scrolling sections are provided with a plurality of protrusions for rendering urethral support.
69. An apparatus according to claim 66, wherein said scrolling sections are provided with a plurality of protrusions for rendering anchoring.
70. An apparatus according to claim 66, wherein said plurality of scrolling sections means two sections.
71. An apparatus according to claim 70, wherein each of said two sections is located on an opposite end of said connector.
72. An apparatus for inserting a vaginal device, comprising:
an enclosure for containing said vaginal device; and
a lubricating element located externally of said enclosure.
73. An apparatus according to claim 72, wherein said lubricating element is a ring located around a circumference of said enclosure.
74. An apparatus according to claim 72, wherein said lubricating element is a layer of lubricant applied to said enclosure which is revealed when a cover temporarily adhered to said layer is removed.

75. An apparatus according to claim 72, wherein said lubricating element is a sleeve movable with respect to the enclosure and located around a circumference of said enclosure.
76. An apparatus according to claim 72, wherein said lubricating element is a layer of lubrication on said enclosure.
77. An apparatus according to claim 76, wherein said lubrication is highly viscous such that once lubrication is located on said enclosure it substantially remains in place until use.
78. An apparatus for extending the shelf life of a vaginally insertable device, comprising:
an enclosure adapted for receipt of at least a first portion of said device;
a section adapted for receipt of at least a second portion of said device such that said second portion is at least partially expanded; and,
wherein said enclosure is adapted for and vaginal insertion of said first and second portions of said device.
79. An apparatus according to claim 78, wherein said section is a flared enclosure.
80. An apparatus according to claim 78, wherein said section is provided with a plurality of slots.
81. An apparatus according to claim 80, wherein said slots are sized and numbered to accommodate said second portion of said device.
82. An apparatus according to claim 80, further comprising a slidable sleeve located externally of said enclosure for repositioning said second portion of said device prior to insertion of said device into a vagina.

83. An apparatus for motivating a vaginally insertable device, comprising:
an outer section, adapted for insertion into a vaginal applicator;
a separate inner section, capable of insertion into and movement within said outer section; and,
wherein the inner section is adapted to removably lock into the outer section for motivating the vaginally insertable device.
84. An apparatus according to claim 81, further comprising a ring, wherein said ring is located on said outer section such that friction is created by said ring when there is movement of said apparatus relative to said applicator.
85. A collapsible apparatus for inserting a vaginal device, comprising:
an enclosure for containing said vaginal device;
a plunger adapted to coaxially fit within said enclosure; and,
wherein said vaginal device is provided with an insert.
86. An apparatus according to claim 85, wherein said plunger is substantially located within said enclosure during storage.
87. An apparatus according to claim 85, wherein said insert is attached to a removal or activator device.
88. An apparatus according to claim 87, wherein said removal activator device is removably latched to the plunger.
89. An apparatus according to claim 88, wherein movement of the plunger out of the enclosure moves said insert at least partially through the vaginal device.